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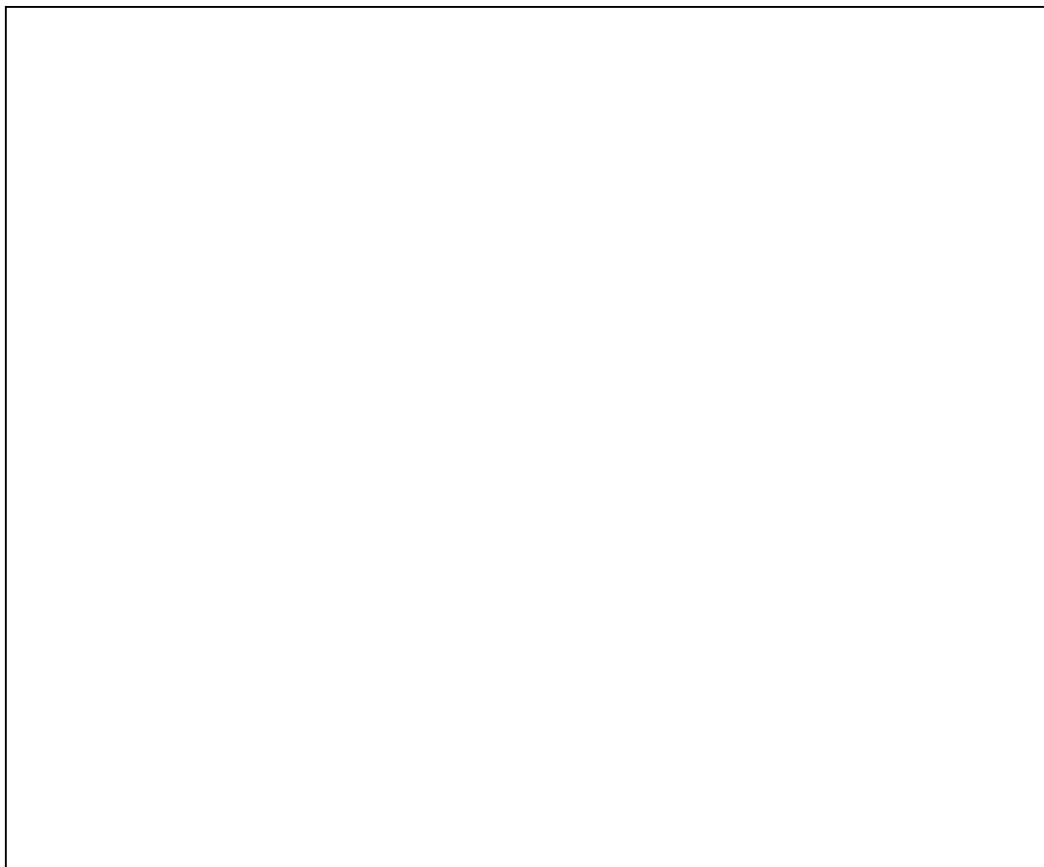
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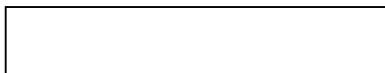
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SUMMARY: Indonesia's Nuclear Program— Quietly Building

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Indonesia's nuclear program is directed toward the export of nuclear materials and technology—probably to other developing nations—and the establishment of an indigenous nuclear power development program. We believe Indonesia, a 1979 signatory of the Nuclear Non-Proliferation Treaty, currently does not have the capability or desire to develop nuclear weapons, but, as it develops its nuclear power capability, could pursue this option.

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SUMMARY

Indonesia's Nuclear Program—Quietly Building

As Indonesia becomes increasingly independent of foreign nuclear assistance, it is slowly becoming a supplier of nuclear products and technology. Two nuclear fuel fabrication plants and a natural uranium production plant began startup operations in 1989. Full-scale operation of these plants could put the country on the supplier side of nuclear sales for the first time. Several countries, including Iran and Vietnam, have approached the Indonesians with requests for nuclear cooperation agreements. We believe other Third World nations will look to Indonesia for an opportunity to use its research reactor to train their nuclear research personnel and as a source of research reactor fuel and natural uranium concentrate.

We believe Indonesia plans to have an operating nuclear power plant on the island of Java in 10 to 15 years, despite its substantial oil production and OPEC membership and its emerging concerns about safety in high seismic activity areas. In early August 1989, President Soeharto approved site selection studies in preparation for the construction of Indonesia's first nuclear power plant. Indonesia plans to sign an agreement with a foreign supplier for the plant by the middle-to-late 1990s. West Germany and Italy probably have an edge over other suppliers by virtue of their involvement in the construction at the Puspitpek nuclear research complex.

Indonesia is aggressively developing a civilian nuclear power program, centered at an extensive nuclear research center, Puspitpek, now under construction. When Puspitpek is completed, in the early 1990s, the Indonesians will have the capability to:

- Support the indigenous development of a civilian nuclear power program.
- Become a supplier of nuclear products and technology, probably to developing nations.
- Pursue a nuclear weapons option, should the desire exist.

Indonesia has shown little interest to date in acquiring nuclear weapons. It is not pursuing technology for the enrichment of uranium to weapons-grade level or the reprocessing of spent fuel to obtain plutonium. These capabilities are not essential for a peaceful nuclear program; at least one of the two would be needed for a nuclear weapons program. We estimate it would take at least 20 years—without significant external assistance—for Indonesia to develop the capability to produce nuclear weapons. This apparent disinterest in nuclear weapons is consistent with Indonesia's sponsorship to the Southeast Asian Nuclear-Weapons-Free Zone proposal.

The Indonesian nuclear program, which has cost US \$400 million to date, seems strongly supported at high levels. Bacharuddin Jusuf Habibie, the Minister of State for Research and Technology, has been Soeharto's principal science and technology adviser since 1976. Habibie, assisted by Djali Ahimsa, director of Indonesia's Atomic Energy Agency, has established clear, realistic goals—using the Puspitpek complex as a cornerstone. Major deficiencies that could affect Indonesia's nuclear power program are an acute shortage of trained personnel needed to complete and staff Puspitpek's advanced facilities and the precarious state of the economy.